

## (U) History Today - 14 June 2013



(U) This article is based on an obituary published by the Kryptos Society.

(U) Dr. Hugh Gingerich earned his PhD in mathematics at the University of Illinois in 1942. He taught at the University of Maryland in the early 1940s, but had issues with the university's administration. He took a position with the Carnegie Institute of Washington, D.C., in 1944.

(U) In 1946, at the recommendation of other mathematics PhDs who were working in cryptology, he was recruited by the Navy's cryptologic organization, then known as Communications Supplementary Activity, Washington (CSAW). He made the transition to AFSA in 1949 and to NSA in 1952.

(U) Among many other achievements, Gingerich wrote what was likely the first operational program for a digital computer at NSA. He programmed ATLAS I, NSA's first computer, to attack some anomalies in the VENONA messages (communications of the Soviet espionage organization that had imperfectly produced one-time pads.)

(U) Gingerich had his idiosyncratic work habits. In the 1950s he was known sometimes to work in a phone booth, where he could get the quiet he needed. He also decided to adopt a personal 28-hour day, and carried on his activities without regard to others' schedules. This lasted until he met [REDACTED] a Portuguese linguist, in 1950. Once they were married, he returned to a more conventional day.

(U) His Ph.D. dissertation at the University of Illinois, "Generalized Fields and Desargues Configurations," was a seminal work, although he himself did not maintain academic connections. In 1990, according to one recollection, a visiting professor was lecturing to NSA mathematicians and made a reference to "Gingerich's Theorem" -- unaware that Dr. Gingerich was sitting in the next room.

(U) Dr. Hugh Gingerich died in 1998 at the age of 82.

(U) We do not have a photograph of Dr. Gingerich. Pictured is ATLAS, the first cryptologic computer, on which he did some important work.

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(U) [Larger view of photo](#)

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